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## ARTICLE OPERATIONS

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**Instead of viewing salespeople as an expendable cost, store managers should treat them as an asset in their battle with e-tailers.**

*by Marshall Fisher, Santiago Gallino, and Serguei Netessine*



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# Retailers Are *Squandering* Their Most Potent Weapons



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# As they fight for survival in the era of online shopping,

brick-and-mortar retailers are turning to an age-old strategy: cutting expenditures on workers. In the U.S. department store segment, for example, head count per store has fallen by more than 10% over the past decade, while wages per employee have dropped by 4%. And payroll isn't the only thing being trimmed: Training budgets have been chopped as well. A survey by Axonify, a provider of training software, found that nearly one-third of retail store associates receive no formal training—the highest deficit in any of the industries surveyed. Understaffing stores and undertraining workers was never a good idea, but it's especially bad now, because it takes away the biggest advantage traditional stores have over e-tailers: a live person a customer can talk with face-to-face.

The root of the problem is that most retailers don't know how to determine the optimal amount of staffing and

training for individual stores. In this article we'll lay out a method for doing that. When applied systematically, it can add as much as 20% to the revenues of existing stores, we've found. Moreover, if staffing increases in some stores are matched by cuts in others, and vendors cover the cost of product training, the higher sales cost little or nothing to generate, so most of the gross profits on that improvement drops to the bottom line.

## The Flaws in Conventional Approaches

It's understandable that brick-and-mortar retailers treat labor as an expendable, variable cost: It's the second-largest expense for most, and stores can cut it quickly just by giving their many part-time associates fewer hours. The trouble with this approach is that it ignores the simple fact that salespeople drive sales. For every dollar a retailer saves on staffing costs, it may be losing several dollars in revenues and gross margin if customers leave a store empty-handed because they can't find a knowledgeable employee to help them. This can create a downward spiral in which fewer associates lead to poor customer service, which causes a further decline in revenues and another round of workforce cuts. And the beat goes on until stores close for good—as 7,795 retail locations in the United States did in 2017, the highest number ever.

Behind this losing labor strategy is business school thinking gone wrong. We teach our students to manage by the numbers. Not a bad idea, except that it leads businesspeople to give too much weight to what's easy to measure and too little to what isn't. For a retailer, the cost of payroll and

### Idea in Brief

#### THE PROBLEM

*To compete with online rivals, brick-and-mortar retailers are reducing costs by cutting the number of store employees and money for training. This undermines one of their big advantages over e-tailers: knowledgeable salespeople who can help customers face-to-face.*

#### THE ROOT CAUSE

*Payroll is a big variable cost that can be trimmed quickly. And given the high turnover that plagues retailers, spending on training can appear to be a waste.*

#### THE SOLUTION

*Determine how many workers and how much training each store needs to optimize revenues and profits, using new methods that involve analyzing historical data, conducting experiments, tracking the training and sales of individuals or teams, and offering incentives.*

- ● **Cutting staffing costs can lead to lower revenues and gross margin if customers leave a store empty-handed because they can't find a knowledgeable employee to help them.**

training is clear-cut. The impact that an adequate number of knowledgeable sales associates has on revenues is much harder to pin down. That imbalance opens the door to delusion: Retailers convince themselves that if they trim payroll by, say, 5% in the last few weeks of a quarter to meet their profit promises to Wall Street, it really won't affect customer service. But over time it does matter.

Making things worse is the framework that retailers use to staff stores. In our experience most treat every store the same and set the labor budget for each at a fixed percentage of forecasted sales for that location. However, adding labor to a store increases revenues at a diminishing rate. There is a staffing level for each store that optimally trades off the revenue gain workers generate with the cost of extra labor. (At the right level, the last dollar spent on labor will produce a dollar of gross margin.) If retailers hit that sweet spot in each location, some stores will end up having a higher ratio of staff to revenues than others.

Which stores tend to benefit from relatively more labor? Those with greater sales potential (as indicated by average basket size and average income in their catchment area) and more competition (as indicated by the number of competing stores—and especially the presence of Walmart—in a five-mile radius). The better service provided by higher staffing is particularly important if a rival has a store a block away that customers can go to if they tire of waiting for an associate to help them in your store.

So the key to escaping the downward spiral is not to give up managing by the numbers. It's to manage by the *right* numbers, which include not just the cost of well-trained store associates but also the *value* they produce.

## Optimizing Staffing Levels

Let's look now at how to figure out the right staffing levels in individual stores. It involves three steps:

**1 Use historical data on absenteeism to estimate the effect of staffing.** Retailers may not realize it, but they already have a way to calculate how staffing influences store revenues: crunching the numbers on what happens when associates don't show up because of

illness, personal problems, decisions to quit, and so on. For example, if 30 people are scheduled to work in a store and only 27 come in, how do actual sales compare with forecasts? If they meet forecasts, the store is probably overstaffed. If they're down 10%, increasing staffing by 10% would most likely raise revenues by 10%.

Obtaining statistically significant results requires a large sample, of course. We use the most granular data from the longest time period a retailer can conveniently provide it for—typically, one year of weekly sales and payroll data. But keep in mind that other forces—such as advertising and the weather—affect sales. We collect data on those too and with machine learning create a demand model that can predict sales in a store as a function of its staffing level and other drivers. Then, using the analysis from that model, we sort a retailer's stores into three tiers: those that could benefit from more labor, those that could live with less, and those that are appropriately staffed.

**2 Validate the results.** The advantage of the first step is that it requires relatively little effort, but you need a rigorously designed experiment to get more-accurate results, because the rate of absenteeism at individual stores varies somewhat randomly. Some stores might have a lot of absenteeism, and some little or none. Absenteeism also isn't consistent over time. It might be heavier on certain days of the week or have no regular pattern: It could be 1% one day and 10% the next in a given store. So it's helpful to run tests with a sample of stores from the first two tiers. Change the staffing levels in a selection of stores and compare the results with what happens in control stores—similar outlets whose staffing levels are kept constant. If you increase payroll in 25 test stores by 10% and leave it unchanged in 25 control stores, and revenues go up 8% and 1%, respectively, in the two groups, you can conclude that the net impact of the staffing increase is 7%. This lets you account for revenue drivers other than payroll, which in this example must have caused the 1% increase in the control group.

Since the profitability of the additional revenues is obviously important, you should track that, too, calculating the gross margin on the incremental sales minus the cost of the additional payroll needed to generate them.



**3 Optimize staffing chainwide and measure the results.** Assuming the experiment in step two validated the findings of the data analysis you did in step one, it's time to implement the findings chainwide. Add labor to the stores that your analysis showed could benefit from more labor, reduce it in stores that need less, and leave it alone in the rest. Then, again, because your experiment's results are still not as precise as you need

them to be, evaluate the impact of the changes to confirm they produced benefits. This new and improved labor plan is not an end point, however, because all the factors that influenced it will change over time. Retailers need to repeat this three-step process, perhaps annually, to adjust as the world around them changes.

As we noted earlier, when staffing increases in some stores are matched by staffing decreases in other stores,




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We saw the upside that this three-step approach can produce at one specialty retailer that had more than 800 stores. The sales drivers that we took into account when we worked with the chain included seasonality, various marketing activities, and promotions. Using a statistical software tool called Stata, we created a demand model and applied it to forecast sales as a function of those factors and staffing levels. The data revealed that 300 stores would benefit from adding labor, 300 could live with less, and 200 were appropriately staffed.

We estimated that 100 of the stores in the first tier would achieve a greater than 5% lift in revenues if their staffing increased by 10%. The retailer's leaders decided to conduct an experiment at 16 of those high-potential stores, which confirmed the predicted revenue bump. The retailer then expanded the workforce at 168 stores where it looked as if adding labor would boost sales and profit, and tracked daily revenues in those test stores and 504 control stores over 182 days. The result: The test stores' revenues grew 5.1% while the control group's remained flat. Moreover, the test stores increased their operating profits by almost 6%.

We've seen similar results at other retailers we've worked with. In one case our analysis showed that every extra dollar the chain spent on payroll would generate anywhere from \$4 to \$28 in additional revenue, depending on the store. The retailer's customer surveys revealed why: The two most important drivers of customer satisfaction were the ability to find an associate who could provide assistance and whether that person was knowledgeable—exactly the factors we're addressing here.

At a grocery retailer we did research with, we saw large differences in basket size across stores. The stores with bigger baskets did a better job of matching staffing to traffic during the day, we found.

The optimization approach we've developed can be used by omnichannel retailers too. They need to recognize that associates drive sales not only in stores but also on the web—by, for example, encouraging customers to create online accounts with the company. So when analyzing whether their brick-and-mortar outlets are over- or understaffed, omnichannel retailers should include such factors in their metrics.

the resulting additional revenues won't cost the retailer anything. Net increases in labor should be made only if they increase profits significantly, however. And though it takes time to reap the benefits of adding workers in many industries, the payoff is immediate in stores that can productively use extra staffing. So retailers need not fear that they'll experience an initial period of lower profitability.

## Increasing Sales Associates' Product Knowledge

Rightsizing store labor is only part of the story. The quality of associates matters immensely as well. An incompetent salesperson might be worse than no one at all. But as we've already noted, retailers have an unfortunate tendency to skimp on training.

Associates can benefit from two types of programs: process training on how to perform such tasks as restocking shelves and executing a customer return, and product-knowledge training about the features of the store's offerings, so they can help customers decide which items to buy. Most retailers we know provide very limited amounts of both. The reason: Training is expensive, and they don't know if its benefits justify the cost—especially given the high turnover that plagues many stores.

In this article we focus on product-knowledge training. However, we believe that retailers should also be investing much more in process training. Other researchers—notably our friend and colleague Zeynep Ton of MIT—have found that it's a critical element of a model that produces more-engaged employees, more-satisfied customers, and superior financial performance.

To accurately weigh the costs and benefits of product-knowledge training, retailers need to follow these three steps:

**1 Track sales by associate and incentivize people to want training that will help them sell more.** A sales commission is the simplest way to do this, but even if associates are on straight salary, information about the sales they make is useful feedback for them. Some retailers, especially those with a small sales force, don't pay commissions because they want their associates to work as a team. In these cases the right unit of analysis is the team, not the individual.

**2 Identify sources of product information.** If you're selling branded products, the brands are your allies and may pay for training about their offerings. After all, they care even more than you do about having their products' features described accurately to customers.

If they foot the bill, your contribution should be providing on-the-job time for associates' training.

**3 Collect data on training activity and compare it with data on individual employees' sales.** The idea is to determine if associates who train more also sell more. You can measure the hours people spend in training, but it's even better to measure the objective knowledge they've acquired, which you can do with online tests. But again, it's important to consider other factors that affect sales. The experience level of the sales associates is particularly relevant, and so are the shifts they work (Saturday's sales are usually higher than Wednesday's) and how many other associates are working the floor with them.

When we followed this process at Dillard's, a department store chain with nearly 300 locations in the United States, the results were telling. Dillard's partnered with Expert-Voice (formerly Experticity), a firm that provides online, voluntary self-guided training modules for retail associates. Sponsored by the makers of goods that Dillard's sells, the modules taught associates about the features of each brand's products. Associates were paid commissions—giving them an incentive to learn how to sell more—and the brands that developed the training offered associates discounts on their products, which were based on how many modules people had taken. Since each module lasted only about 20 minutes, many associates did more than one.

After assembling data on the training history and sales productivity of the associates over a two-year period and on their years of experience and other influential factors mentioned earlier, we created a model to assess the effect of training. We found that for every online module associates took, their sales rate increased by 1.8%. Since training was voluntary, not all associates engaged in it, but the average hourly sales of people who took it were a whopping 46% higher than those of people who abstained. The associates who did the training were already selling more per hour than those who didn't, and this accounted for about half the 46% difference. However, a comparison of the sales rates before and after the training showed that it accounted for the rest. Given that associates took the modules on their own time, most of the gross profits resulting from the online training fell straight to the bottom line.

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- ● The average hourly sales of people who did the modules were a whopping 46% higher than those of people who abstained.

To explore what was driving these positive results, we surveyed more than 8,000 sales associates who had taken the training. They reported that its two main benefits were greater confidence in their selling abilities and general product knowledge they could apply when selling other offerings in the same category. In fact, in our results it was clear that the effects of training on a specific brand spilled over to similar brands. Training on New Balance shoes, for example, increased not only their sales but also the sales of all sports shoes.

Finally, we wanted to understand whether the benefits from training were uniform across associates and if not, which people got the most out of the training. Did the “rock stars” become even better, or did it help underperformers improve, serving as a great equalizer? Before the training, we divided associates into four tiers according to their track records, putting top sellers in the first tier and the weakest sellers in the fourth. Our analysis of the results shows that for every online module taken, the top-level associates increased their sales by 1.6% (very close to the 1.8% average for all associates). The benefit for the sales associates in the second tier was 4.2%—more than twice the average. The benefit for those in the third tier was 1.4%. But the training had no effect on the performance of associates at the bottom. Clearly, training can help the best associates and significantly lift the sales of good associates who are eager to improve. And if you track the results, you can also identify employees who need to be moved to different roles within the company or let go.

Providing training in both products and processes is part of a larger strategy we believe in: approaching store

employees as an asset to be maximized, not a cost to be minimized. Zeynep Ton has argued convincingly that treating workers well is a win-win. A recent study at Gap showed that one way of doing that—by giving employees more-predictable, consistent work schedules—resulted in a significant revenue increase. And in a recent HBR interview, the head of Walmart U.S. revealed that the megaretailer, criticized for years for the way it has treated its workers, is getting the message and has been improving pay and benefits, as well as training on processes.

**THE DECIMATION OF** brick-and-mortar retailing is widely expected to continue over the next decade. A recent UBS study predicted that by 2025, another 30,000 to 80,000 U.S. stores will have closed their doors. Many more chains will die. Unless retailers change the way they hire, schedule, and train labor, they risk being among the casualties. The approach we propose isn’t complicated, and it yields almost immediate results. It’s high time for retailers to abandon old, ineffective ways of operating and recognize that store employees are one of their best weapons in the battle for consumers’ business. ☺

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## FURTHER READING

### LIMITED TRAINING IN RETAIL

“**Most Retail Employees Receive No Real Training.**” Ben Unglesbee, *Retail Dive*, February 21, 2018

### STORE LABOR AS AN ASSET

“**Shoppers Need a Reason to Go to Your Store—Other Than Buying Stuff.**” B. Joseph Pine II, HBR.org, December 7, 2017

“**Out of Stock? It Might Be Your Employee Payroll—Not Your Supply Chain—That’s to Blame.**” Knowledge@Wharton, April 4, 2007

“**A Find at Gap: Steady Hours Can Help Workers, and Profits.**” Noam Scheiber, *New York Times*, March 28, 2018

“**The Good Jobs Solution.**” Zeynep Ton, HBR.org, December 20, 2017

“**Research: When Retail Workers Have Stable Schedules, Sales and Productivity Go Up.**” Joan C. Williams, Saravanan Kesavan, and Lisa McCorkell, HBR.org, March 29, 2018

“**The Right Thing to Do.**” Steve Prokesch, HBR.org, December 7, 2017

### TECHNICAL DETAILS ON FORMULAS

“**Does Online Training Work in Retail?**” Marshall Fisher, Santiago Gallino, and Serguei Netessine, working paper, September 17, 2018

“**Setting Retail Staffing Levels: A Methodology Validated with Implementation.**” Marshall Fisher, Santiago Gallino, and Serguei Netessine, working paper, August 1, 2018